



UV glass bonding system with transparent benefits...

System properties

- Clean, transparent bonds
- High strength
- Precisely controllable curing

Advantages

- Uncomplicated handling
- New UV LED adhesives
- UV LED lamps
- New UV LED arrays and flood lamps

Panacol Vitralit® UV adhesive technology

Panacol-Elosol GmbH, a member of the Hönle Group, develops and produces UV adhesives and coating materials for a wide range of industrial applications and, in particular, Vitralit® UV adhesives for the glass industry.



Panacol Vitralit® UV adhesives

UV-curing adhesives are becoming increasingly important in many industrial production processes. The advantages for the user are clear: The use of suitable UV light emitters allows the exact time of curing to be precisely defined; the curing time itself is exceptionally short.

In most cases, the final strength exceeds that of the bonded materials.

In addition to reliably bonding a wide range of materials, our Vitralit® adhesives can fulfil your special requirements.

Hönle UV devices

In combination with suitable UV lamps from Hönle's range, Panacol Vitralit® glass adhesives facilitate unsurpassed bonds and innovative production possibilities. And they are ideal for processes in which short cycle times are vital.

Typical applications:

- Glass ornaments (facets, bevels)
- Glass furniture, display cabinets
- Interior design
- Glass decoration
- Lighting
- Glass laminations

Key advantages of UV bonds compared to other adhesive systems

- Rapid curing boosts productivity
- Curing "at the push of a button" – precise alignment of workpieces and low stocks
- Even force buildup prevents detrimental stress peaks
- Solvent-free – environment-friendly, with 100 percent solids in the cured state
- Curing with visible light – suitable for bonding materials containing UV blockers
- Joining different materials – free hand in design
- One-component adhesive – no mixing, no pot life and therefore no time limit for processing
- Same refractive index as glass for invisible bonded joints
- Good resistance to temperature, chemicals and humidity; dishwasher-safe
- Resistant to yellowing – material remains transparent and colourless

Vitralit® UV adhesives for the revolutionary LED technology:

To achieve the best results, the monochromatic LED lamps and the adhesives must be perfectly matched.

Panacol has developed Vitralit® UV LED adhesives that are specially adapted for this technology and meet the requirements for modern bonding agents, such as protection against yellowing, good moisture resistance, excellent elasticity and high strength.

We make UV light work!



Piro Profi Set for surface pretreatment

The long-term adhesive strength of adhesives and paints can diminish with exposure to moisture or high loads. This problem can be solved with flame treatment, which increases adhesion by 30 percent. This surface preconditioning – called silication – ensures a strong, permanent bond between problem surfaces.



Piro Profi Set

Glue chipping – the latest technology for producing decorative glass

Glue chipping is an innovative process for decorating satinised glass. After UV curing, a special chemical process is used to generate tensions in the glass surface. The surface cracks in a defined pattern and the resulting glass chips can be removed, leaving behind transparent recesses in the surface. With this new technology – which is potentially well suited for industrial-scale production of decorative glass – a wide range of artistic motives and ornaments can be applied to windows, doors and other glass objects.

For detailed information, ask for our special glue chipping data sheet.



Panacol-recommended products

Bonding: Glass - Glass, Metal, Laminated glass, Stone, Tempered glass...

Vitralit®	UV 2770	UV 2771	6128	6133	6134	UV 2725	VBB-N
Base resin	Acrylate	Acrylat	Acrylate	Acrylate	Acrylate	Acrylate	Acrylat
Viscosity (mPas)	30 - 100	2.000 - 3.500	550 - 1000	600 - 1000	700 - 1000	200 - 400	50 - 150
Temp. resist. (°C)	-20 to +120	-20 to +120	-40 to +150	-20 to +120	-20 to +120	-20 to +140	-40 to +140
Curing with UVA Hand 250	UV VL (LED 395)	UV VL (LED 395)	UV Thermal (120°C)	UV VL (LED 395)	UV VL (LED 395)	UV	UV VL (LED 395)
Colour	Clear, colourless	Clear, colourless	Transparent	Clear, colourless	Clear, colourless	Clear, colourless	Clear, colourless
Typical applications	Bonding glass edge-to-edge, Laminated glass - lamin. glass, Tempered glass - temp. glass, Glass - lamin. glass/stone	Hard glass/glass, glass/metal (alu and stainless steel), Ideal for tempered glass and laminated glass through its high elasticity	Glass - metal, Glass - stone, Glass - marble and many thermoplastic materials	Glass - metal, Glass - stone, Laminated glass - metal, Tempered glass - metal, Plane surfaces	Glass - glass, Glass - metal, Glass - stone (gran.), Laminated glass - lamin. glass, Laminated glass - metal or tempered glass	Large-surface, Glass - glass, Glass - metal, Glass - stone	Full glass display with high dynamic stress (torsion), Vitrine for museum, Laminated glass, Glass - glass, Glass - metal,
Characteristics	LED-optimised curing, Excellent capillary action, Excellent cleaning properties, High strength and impact-resistant	Impact resistant, UV resistant, No yellowing, Dry surface	Also combination curing (UV and temperature), High strength and impact-resistant	LED-optimised curing, High strength and impact-resistant	LED-optimised curing, High strength and impact-resistant	High elongation at break, Very elastic, Good resistance to peeling, Very clear even in thick layers	Particularly humidity resistant, UV resistant, No yellowing

Plastic-Bonder, PMMA bonds, Decorative glass bonds...

Vitralit®	7641	4731	7562	9140vl	VBB1	UV 2415	7204 V
Base resin	Acrylate	Acrylate	Acrylate	Urethane acrylate	Urethane acrylate	Acrylate	Urethane acrylate
Viscosity (mPas)	50 - 100	900 - 1500	500 - 800	1000 - 2000	1000 - 1500	1500 - 2500	200 - 400
Temp. resist. (°C)	-30 to +120	-30 bis +120	-40 to +150	-40 to +130	-40 to +150	-30 to +120	-40 to +120
Curing with UVA Hand 250	UV VL (LED 395)	UV VL (LED 395)	UV VL (LED 395)	UV VL (LED 395)	UV VL (LED 395)	UV VL (LED 395)	UV VL (LED 395)
Colour	Clear, colourless	Clear, colourless	Clear, colourless	Clear, brownish	Clear, colourless	Clear, yellowish	Clear, colourless
Typical applications	PMMA and PC edge-to-edge bonding	PMMA, PC and glass surface bonding	Glass/PC, Glass/laminated glass/tempered glass, etc.	PMMA, PC for large-area bonds	Glass bevel bonds, Elastic glass edge-to-edge bonding, Plastics/glass	PMMA/glass, PC/stainless steel, PC/aluminium	Meter joint bonding of PC and PMMA
Characteristics	LED-optimised curing, Excellent capillary action, High strength	LED-optimised curing, Elastic, Surface bonding PC und PMMA	Flexible, For large-area bonds, Very low moisture absorption	High flexibility, Surface bonding PMMA, PC	LED-optimised curing, High flexibility, Good resistance to peeling	Dry surface, Impact-resistant, High strength, High temper. /media resist.	Elastic and equalizing

The range of UV devices from the Hönle group

Our UV adhesives are best cured with high-intensity UVA lamps and special UV fluorescent lamps.



UVA Hand 100 and 250

- Compact hand lamp for mobile and stationary use
- Homogeneous intensity distribution
- Range of emission spectra through various lamp-filter combinations



NEW! Vitralit® flood lamp

- Ideal for glass cabinets
- Height-adjustable
- Even intensity distribution

The new UV LED technology presents an innovative alternative ideally suited for joining long glass edges or surfaces.

The UV LED lamps of the Hönle group have a range of advantages for production

- Usable UV energy without heat generation
- No ozone emission
- Longer service life (more than 10.000 hours)
- Low power loss
- Very low power consumption
- Switching on/off without wait times



New! UV LED arrays

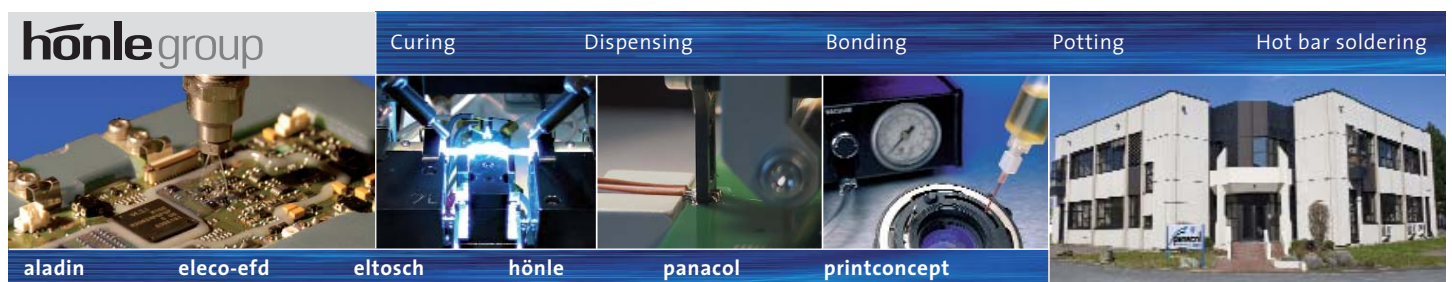
- For curing edge and frame bonds
- Exposure surface of 500 to 2000 x 10 or 19 mm
- Various lengths: 500, 1000 and 2000 mm
- Even energy density across the entire length
- Cost-effective

New! UV LED flood lamps

- 15 x 15 cm exposure surface
- Handle at top
- Ideal for bonding surfaces
- Low heat generation, therefore suitable for temperature-sensitive substrates



You can find further information about the individual glass bonding product groups in our special product data sheets.



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